



# **Abstract Book**

---

## *the 2nd* **ICOPH - TCD**

---

***The 2nd International Conference of Public Health  
for Tropical and Coastal Development  
“Public Health Empowerment for Tropical  
and Coastal Regions to Achieve SDG’s”***

**FKM UNDIP PRESS**

July, 30th - 31st, 2018  
Gumaya Tower Hotel, Semarang - Indonesia

**ABSTRACT BOOK**  
**THE 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON PUBLIC**  
**HEALTH FOR TROPICAL AND COASTAL DEVELOPMENT**  
**©2018 FKM UNDIP PRESS**

**EDITORS:**

Praba Ginandjar  
Lintang Dian Saraswati  
Dwi Sutiningsih  
Nurjazuli  
Nikie Astorina Yunita Dewanti  
Nissa Kusariana

This abstract book is published by

**FKM UNDIP PRESS**

Jl. Prof. Soedarto, SH, Tembalang

Semarang 50275

Phone: +62-24-7460044

E-mail: fkmundip.press@gmail.com

**ISBN : 978-602-5788-06-2**

Copyright © 2018 by FKM UNDIP PRESS

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, without permission in writing from the publisher.

## PREFACE

The coverage of this book includes all abstracts of the papers that have been presented at the International Conference on Public Health for Tropical and Coastal Development 2018. The conference was held by the Faculty of Public Health Diponegoro University from July 30 to 31, 2018. The venue of the conference was in Gumaya Hotel at Semarang.

Founded on January 4, 1985, the FPH UNDIP is the first faculty of public health in Central Java Province, Indonesia. As one of Indonesia's leading providers of public health education and research, FPH UNDIP is dedicated to improve the health of the Indonesian population as well as the global community. The Dean of Faculty of Public Health and the Chairs of the Bachelor's Program in Public Health, Master's Program in Public Health, Master's Program in Health Promotion, Master's Program in Environmental Health and Doctorate's Program in Public Health were proudly welcoming the participants to the event.

This conference was intended to build a mutual collaboration and share experiences among faculty members, graduate students, researchers, policymakers, and stakeholders. It was an exciting event that was intended to draw compelling attention and concern for academicians, researchers, professionals, administrators, leaders in health institutions, policymakers, industry representatives, undergraduate as well as graduate students, and others who might relate or had the concern on the topic.

A total of about 200 abstracts were presented in two days. More than 300 participants attended the conference. Geographically, the attendees came from Australia, Thailand, Japan, Indonesia, United States of America, and the Netherlands. Selected peer-reviewed articles presented at this conference will be considered for publication on some peer-reviewed journals. Subsequently, some articles will be chosen to be published on the International Journal of Public Health for Tropical and Coastal Regions.

I also would like to thank all participants, the members of the Committee and most importantly the administration staff of ICOPH-TCD for putting this conference together.

Hanifa M. Denny  
Dean

## ORGANIZING COMMITTEE

- Board of Adviser : Hanifa Maher Denny, SKM., MPH., Ph.D
- Chair : dr. Martha Irene Kartasurya, M.Sc., Ph.D
- Vice of Chair : Farid Agushybana, SKM., DEA, Ph.D
- Secretary : 1. Dr. dr. Apoina Kartini, M.Kes  
2. Dr. Yusniar Hanani, STP, M.Kes  
3. Dina Rahayuning Pangestuti, STP, M.Gizi
- Treasurer : 1. Dr. Siti Fatimah Pradigdo, M.Kes  
2. Dr. Sri Winarni, M.Kes  
3. Maricha Fitriantini, SE  
4. Syai'datina Zahroh, SE
- Secretariat : 1. Tri Retna Setyawati, SE  
2. Nissa Kusariana, SKM, MSi  
3. Linda Krisnawati, Amd  
4. Nikie Astorina, SKM., M.Kes
- Scientific Division: 1. Praba Ginandjar, SKM., M.Biomed  
2. Lintang Dian Saraswati, SKM., M.Epid  
3. Dr. Drh. Dwi Sutiningsih  
4. Dr. Nurjazuli, SKM., M.Kes
- Plenary Division : 1. Aditya Kusumawati, SKM., M.Kes  
2. Ratih Indraswari, SKM., M.Kes  
3. Yudhy Dharmawan, SKM., M.kes
- Public relation : 1. Ir. Suyatno, M.Kes
- Liaison Officer : 2. Dr. Yuliani Setyaningsih, SKM., M.Kes  
3. Sidiq Muhammad Asnan, ST, MM



Sponsorship Division: 1. Dr. dr. S. A. Nugraheni, M.Kes

2. Dr. Ir. Martini, M.Kes

3. Besar Tirtohusodo, M.Kes

Logistic Division : 1. Shofiah Dwi Setyowati, S.Kom

2. Imam Yulianto, ST

3. Joko Nur Santoso

4. Riwanto

5. Ketut Budiman, ST

Documentation : 1. Teguh Wibowo, A.Md

2. Priguna Septia Putra, ST

3. Yuli Eko Sarwono, SE

## MAIN SPEAKER

- Anung Sugihantono, MD, MS
- Hanifa Maher Denny , BSPH, MPH, Ph.D
- Prof. Yothin Sawangdee:
- Prof. Stanley Gordon Fenwick
- Prof. drh. Wiku Bakti Bawono Adisasmito, MSc, PhD
- Ernst Spaan, Ph.D
- Keiko Osaki, MS
- Dr. Reece Hinchcliff

## TIME SCHEDULE

**Day 1: July 30<sup>st</sup>, 2018**

No.	Time	Activity
<b>I</b>	<b>07.30 – 08.30</b>	<b>REGISTRATION</b>
<b>II</b>		<b>OPENING CEREMONY &amp; PLENARY SESSION</b>
	08.30 – 08.40	Safety Induction
	08.40 – 09.00	Singing Indonesian national anthem & Diponegoro University Hymne
	09.00 – 09.20	Traditional dance
	09.20 – 09.35	Welcoming speech from Faculty of Public Health Dean
		Hanifa Maher Denny, SKM, MPH, PhD
	09.35 – 09.50	Opening ceremony from Rector of Diponegoro University
		Prof. Dr. Yos Johan Utama, SH, M.Hum
	09.50 – 10.00	Photo session
	10.00 – 10.30	Keynote speech: <b>Indonesian Strategies in public health empowerment and coastal development to achieve SDGs</b>
		dr. Anung Sugihantono, M.Kes
	10.30 – 10.35	Plenary session I: Moderator : -dr. Sakundarno Adi, MSc, PhD
	10.35 – 11.05	1.Prof. Stanley Gordon Fenwick: <b>One Health Approach for Public Health in Tropical and Coastal Area</b>
	11.05 – 11.35	2.Prof. drh. Wiku Bakti Bawono Adisasmito, MSc, PhD: <b>Managerial Epidemiology for One Health Approach in Tropical and Coastal Region</b>
	11.35 – 12.05	3.Prof. Yothin Sawangdee: <b>Southeast Asian Coastal's Passive Migrants: Job opportunity, poverty, and accessibility to health care</b>
	12.05 – 12.50	Discussion and closing of session
	12.50 – 13.00	Memento
	13.00 – 14.00	Lunch and prayer break
	14.00 – 17.00	Oral presentations in 7 rooms
<b>III</b>	<b>18.30 – 20.40</b>	<b>GALA DINNER</b>
	18.30 – 18.40	Opening (Safety Induction)
	18.40 – 19.00	Inauguration
	19.00 – 19.20	Traditional Dance
	19.20 – 19.30	Speech Rector of Diponegoro University
		-Prof. Dr. Yos Johan Utama, SH, M.Hum
	19.30 – 20.35	Dinner
	20.35 – 20.50	Closing of Gala Dinner

**Day 2: July 31<sup>st</sup>, 2018**

<b>No.</b>	<b>Time</b>	<b>Activity</b>
<b>I</b>	<b>07.30 – 08.00</b>	<b>REGISTRASI</b>
<b>II</b>	<b>08.00 – 14.20</b>	<b>PLENARY SESSION</b>
	08.00 – 08.10	Opening
	08.10 – 08.30	Safety Induction
	08.30 – 08.40	Plenary session II : Moderator: -Drg. Zahroh Shaluhayah, MPH, PhD
	08.40 – 10.20	1.Hanifa Maher Denny, SKM, MPH, PhD: <b>Faculty of Public Health Roles in Empowering the Community in Indonesian Coastal Regions to Achieves SDGs</b>
		2.Ernst Spaan, Ph.D: <b>Community resilience and adaptation to climate change in coastal Indonesia</b>
		3.Keiko Osaki, MS: <b>Does Maternal and Child Health handbook function as a source of data for continuum care of maternal and child health in Indonesia?</b>
		4.Dr. Reece Hinchcliff: <b>The strategic agility of healthcare managers must rise with the coming tide</b>
	10.20 – 11.05	Discussion and closing of session
	11.05 – 12.30	Oral presentations in 7 rooms
	12.30 – 13.30	Lunch and prayer break Poster session
	13.30 – 15.00	Oral presentations
<b>III</b>		<b>CLOSING CEREMONY</b>
	15.00 – 15.10	Closing remarks -Dean of Public Health Faculty
	15.10 – 15.30	The Awarding for Best Oral Presentation and Best Poster
	15.30 – 15.40	Photo session



## ORAL PRESENTATION

**Monday, 30<sup>th</sup> July 2018**

**Room 1**

Code	Authors	Title
R11001	Adita Puspitasari Swastya Putri	Indicator of Dyslipidemia for Ischemic Stroke in Elderly with Hypertension
R11002	Ta Larasati	Physician Involvement with Family "Genogram Model" to Improve Healthy Lifestyle to Patient with Family History of Type 2 Diabetes Mellitus
R11003	Triselina Monika, Atik Kridawati	Eating Patterns and Physical Activities Reduce Diabetes Melitus Type 2
R11004	Rezka Rahmadhana, Galih Ricci Muchamad, Kartika Dian Elliana, Sri Winarni,	Bikbeng Andi: The Utilization of Koro Benguk Seed Extract as An Alternative Treatment of Diabetes Mellitus
R11005	Dwi Sutiningsih, Yusniar Hanani Darundiati, Sri Rahayu	Antituberculosis Effect of Extract of Makasar Fruits ( <i>Brucea javanica</i> L. Merr) on <i>Mycobacterium Tuberculosis</i> by In Vitro
R11006	Nissa Noor Annashr, I Made Djaja, Kusharisupeni	Determinants of Plumbun Level in Blood among Elementary School Students in Cinangka, Bogor
R11007	Hafidzoh Najwati, Lintang Dian Saraswati, Muyassaroh	Factors Associated with Cerumen Impaction in The Coastal Elementary Schools (Case Study in 1st Grade of Five Elementary Schools, Bandarharjo Health Center's Work Area, in North Semarang)
R11008	Muhammad Mundzir Kamiluddin, Herdis Herdiansyah	Living Room Ventilation as The Causing Factor of High Rate of Pneumonia Incident to Toddlers in DKI Jakarta
R11009	Lintang Dian Saraswati, Ari Udiyono, Henry Setyawan Susanto, Praba Ginandjar	Prevalence of Blood-Borne Disease in The Community (A Cross-Sectional Study in The District of Semarang)
R11010	Andi Susilawaty, Nurdiyanah Syarifuddin, Mutassirah, Muli Rezky, Syahrul Basri	Spatial Analysis of Pulmonary Tuberculosis in The Lowland and Highland of Gowa Regency, South Sulawesi Province, Indonesia
R11011	Chinta Yolanda Sari, Sorimuda Sarumpaet	The Influence of Risk Factor of Recovery Treatment of Tuberculosis Patients in Six Puskesmas in Medan City
R11012	Titiek Hidayati, Tri Pitara, Noviana Haryuni, Adelia Amila, Aulia Fajri	Factors that Affect The Success of Tuberculosis Therapy in Primary Care
R11013	Bagoes Widjanarko, Lintang Dian Saraswati, Praba Ginandjar, Putri Septyarini	The Psychological and Social Impact of HIV Infection Associated with Childhood Tuberculosis
R11014	Dyah Wulan Sumekar Rengganis Wardani, Endro	Housing Condition as Tuberculosis Infection Risk Factor

	Prasetyo Wahono	
R11015	Anggun Nurus Sholikhah, Yeni Farida, Rasmaya Niruri	Pharmacovigilance Study of Antituberculosis Drug Regimens in Adult Patients
R11016	Rr. Anggun P. Djati, Tri Ramadhani, Nova Pramestuti, Dwi Priyanto, Tri Handayani, Tri Edhi Budhi Soesilo	System Dynamic Model of Leptospirosis Control in Demak, Indonesia, 2014
R11017	Siti Thomas Zulaikhah	Analysis of Risk Factors Related to The Incidence of Leptospirosis in Semarang City
R11018	Dyah Widiastuti, Dewi Puspita Ningsih, Siwi Mars Pramata Wijayanti	Leptospirosis Outbreak during Harvesting Season in Kebumen, Central Java (The First Case Report in Kebumen)

## Room 2

Code	Authors	Title
R12001	Mohammad Zen Rahfiludin, Siti Fatimah Pradigdo, Suroto, Dina Rahayuning Pangestuti	The Impact of Counseling on The Improvement of Nutritional Knowledge and Physical Activity on Women Prisoners (A Study at Women Penitentiary Institution Class II A Semarang)
R12002	Suyatno.	Socio-Economic Status of Families as Predictors of Stunting Phenomenon among Elementary School Students at Semarang City, Central Java, Indonesia
R12003	Veni Hadju, Syafaruddin Nurdin, Andi Imam Arundhana n	Effect of Low Dose of Moringa Oleifera in Pregnant Mothers on Hemoglobin and Birth Weight in Jeneponto District, South Sulawesi, Indonesia
R12004	Ahmad Syfiq, Sandra Fikawati, Lulu'l.	The Role of Environmental Factors on Stunting among Children under Two in Indonesia
R12005	Trias Mahmudiono, Dwi Putri Pangesti Suryo Andadari	Dietary Diversity in Agricultural and Coastal Area as Potential Source for The Prevention of Child Stunting in Sidoarjo District
R12006	Rian Diana, Annis Catur Adi.	Mother's Knowledge, Attitude, and Practice of Exclusive Breastfeeding: Entry Point to Prevent Stunting
R12007	Mufidah Ahmad, Irohatul A'ila, Fikriyah Alaiyu, Stefania Widya Setyaningsih, Mahmud Aditya Rifqi	Formulation of Pie-Biscuit and Protein Isolat as Alternative of Snack for Stunted Children
R12008	Esti Katherini Adhi, Sandra Fikawati, Ahmad Syafiq	Age of Milk Introduction is The Dominant Factor Related to Stunting in Children 24 Months in Bojong Gede Sub-District, Bogor District in 2018
R12009	Sutti Rainy, Sandra	Intervention to Improve Height for Age Z-Score

	Fikawati, Ahmad	of Wasting Toddlers Age 6-23 Months Old in Depok City
R12010	Dwi Ardyna Octa Sari, Ahmad Syafiq, Sandra Fikawati	Effect of Milk Intervention and PGS-PL Education toward Nutritional Status of under Two Children with Wasting in Depok City
R12011	Novita Nining Widyaningsih, Kusnandar, Sapja Anantanyu	Household Food Security and Food Diversity as Risk Factor for Stunting in Toddlers at 24-59 Months of Age
R12012	Vilda Ana Veria Setyawati, Dona Kuswintoro Hidayat, Haniek Sofia Andika, Anissa Nur Pradani	The Role of Familiy's Socio-Economic at Stunted Adolesences Food Intake in Second Growth Spurt

### Room 3

Code	Authors	Title
R13001	Diah Indriani	Life Survival Rate of Twin Child under 5 Years in Indonesia
R13002	Mulianti, Yane Tambing	Risk Factor of Newborn Cases with Low Birth Weight at General Hospital Dok Ii Jayapura
R13003	Eka Yunila Fatmasari, Ayun Sriatmi, Sutopo Patria Jati, Antono Suryoputro	Stakeholder Mapping Analysis in The First 1000 Days of Life Effort in Temanggung and Semarang
R13004	Rr. Vita Nur Latif, Nor Istiqomah, Dwi Edi Wibowo	Characteristic of Several Infant Mortality Risk Factors in Batang Regency
R13005	M. Rr. Sri Puji Rahayu	Epidemiology Analysis of Asphyxia Case in Neonatal Death
R13006	Djoko Nugroho, Sri Winarni, Farid Agushybana, Undari Nurkalis	Social Risk Factors of Pregnancy in 20 Years Age in Indonesia
R13007	Rahmatika Nur Aini, Diffah Hanim, Didik Gunawan Tamtomo	Association of Anemic Mothers Anc in The First 280 Days of Life with Birth Weight: Cross Sectional Study in Sukoharjo, Indonesia
R13008	Liza Mouliza	Analysis of Maternal Perinatal Audit (AMP) Implementation in Mandailing Natal District of Sumatera Utara Province
R13009	Sri Achadi Nugraheni, Ronny Aruben , Anung Sugihantono, Izwardy, D, Wurjandaru, R.G2, Sulistiawati, Etik Sulistyawati, Ike Johan Prihatini, Ifa Nurchumaida	The Effect of Training Towards Knowledge and Practices of Dasa Wisma Activists as The Companions of Pregnant Women in Low Birth Weight Prevention
R13010	Lia Kurniasari, Nida Amalia, Noor Azizah Yuda Putera	Early Marriage in Adolescent Opinion
R13011	Tuti Surtimanah	Differences of Family Support and Iron Tablets



		Consumed Post Pregnant Women Classes and Midwives Counseling
R13012	Shrimarti Rukmini Devy, Riris Diana Rachmayanti, Fildzah Karunia Putri	Maternal Care among Madurese through The Form of Culture
R13013	Ratna Indriawati	The Impact of Breakfast Toward Nutrition Status and Cognition in Children 9-12 Years Old
R13014	Salimar, Anies Irawati	Maternal Height as An Determinant Factors of Children Not To Be Stunting until Age 59 Months
R13015	Oktaviany Ismiarika Sulistiyanti, Martono Tri U, Linda Dewanti	Effect of Colostrum Intake, Frequency, and Duration of Feeding to Prevent Neonatal Jaundice
R13016	Kusuma Estu Werdani	History of Children and Malnutrition Status in Magetan, Indonesia
R13017	Yulia Wahyuni, Umi Kholifah, Idrus Jus'at	Macronutrient Intake, Vitamin C, Purine Intake, Body Mass Indeks and Uric Acid Levels in Man (Aged 26-45 Years Old) in RW 05 Sub-District Bukit Duri Jakarta

#### Room 4

Code	Authors	Title
R14001	Budi Aji, Arih Diyaning Intiasari, Siti Masfiah	Insights into Urban Informal Workers in Indonesia: Health Insurance Enrollment, Adverse Selection Issue and Access to Health Care
R14002	Ayu Laili Rahmiyati, Budiman, Lina Safarina	Analysis of General Health Services Cost in Puskesmas Cimahi City West Java Indonesia
R14003	Thinni Nurul Rochmach, Hanin Dhany Robby, Dwi Ratnasari	Comparison of Economy Loss between Generic Drug and Patent Drug in Stock-Out and Stagnant Condition at Surabaya Islamic Hospital
R14004	Destanul Aulia, Sri Fajar Ayu	Analysis of The Economic Burden of Smokers and Non-Smokers Fishermen in Medan City
R14005	Zafirah Rizka, Supoto Patira Jati, Syamsulhuda	Implementation of National Health Insurance Fraud Prevention Program Analysis at Public Health Centers in Semarang
R14006	Ratu Matahari, Fitriani Putri Utami	Understanding HIV/Aids Perception Using Health Belief Model: A Qualitative Study of Female Sex Workers with HIV/Aids
R14007	Ulfia Hazna Safira, Djazuly Chalidyanto, Hanin Dhany Robby	Analysis of Students Acceptance Determinant Towards The National Health Insurance Based on Technology Acceptance Model (TAM)
R14008	Hartuti Purnaweni	Open Defecation Free Policy in Semarang City
R14009	Septo Pawelas Arso, Sutopo Patria Jati	Application of Analytical Hierarchy Process (AHP) Method in Determining of Critical Success Factor (CSF) Integration of BSC and EFQM at Tugurejo Provincial Hospital in



		Semarang
R14010	Sutopo Patria Jati, Nikie Astorina Yunati Dewanti, Ayun Sriatmi, Eka Yunila Fatmasari	Needs Assessment of Information System Monitoring and Evaluation of Spm Health Sector in Central Java
R14011	Ayun Sriatmi, Wulan Kusumastuti	Immunization Punctuality in The Achievement of Complete Basic Immunization for Babies Age 12-23 Months in Semarang
R14012	Reviono Yusniar	Factors Affecting Hospital Performance in Tuberculosis Control of Dots Strategy in Central Java
R14013	Delima Rahayu Istiqomah, Bagoes Widjanarko, Sutopo Patria Jati	Analysis of Implementor Behavior in Implementation of Lampung Regional Regulation Number 8 of 2017 about Non-Smoking Area (Study on Faculty and Study Program of Public Health in Bandar Lampung)
R14014	Henni Febriawati, Lizar Alfansi, Effed Dart Hadi, Syaiful Anwar Ab	The Role of Function Management to Control Patients from Public Health Center in The City Bengkulu
R14015	Malyo Lukius, Zainuri Agus, Rantetampang Andreas	Factors that Influence The Performance of Implementation Program of Integrated Registration and Reporting System (SP2TP) Puskesmas in Regional Work of Health Department Yahukimo Regency Papua Province
R14016	Rani Tiyas Budiyantri, Ayun Sriatmi	Cybersecurity Challenge of Big Data in Universal Health Coverage
R14017	Sri Winarni, Najib, Yudhy Dharmawan, Desi Nuri	Factors Causing The High Unmet Need in Tegal and Klaten Regency
R14018	Nanik Trihastuti, Kanyaka Prajna Paramita, Bagoes Widjanarko	The Impact of Asymmetric Information in Medical Services: A Study in Progressive Law Perspective

## Room 5

Code	Authors	Title
R15001	Amalia Rahmandani, Yohanis Franz La Kahija, Salma	Forgiveness Meditation as An Effort in Improving Mental Health among College Students
R15002	Sri Wahyuni	Psychoeducation Dzikir Reduces Percieved Stress, Depression Syndrome, Cortisol and Increases Igg on Primiparous Women
R15003	Anne Van Der Linden	Cross-Cultural Validation of The Patient Health Questionnaire (Phq-9) in Bahasa Indonesia to Measure Depression among People Affected by Leprosy in Central Java, Indonesia
R15004	Tessa Coltof	Measuring Social Participation of Persons Affected by Leprosy in Indonesia through Validating A Simplified Version of The

		Participation Scale
R15005	Marsella Martha Robot	Depression Associated with Quality of Life in People with Paraplegia
R15006	Salma, Dian Veronika Sakti Kaloeti, Amalia Rahmandani, Hastaning Sakti, Suparno	Adverse Childhood Experiences and Depression among University Students
R15007	Runjati, Elisa Ulfiana, Bahiyatun, Sri Wahyuni	The Impact of Postpartum Coping Skill Classes toward Stress Level, Maternal Self- Efficacy, Growth and Development of The Baby, and Cortisol Level
R15008	Cahya Tri Purnami, Ari Suwondo, Dian Ratna Sawitri, Sri Sumarni	Psychometric Measurement of Stress among Midwives at Primary Health Care Province of Central Java Indonesia
R15009	Priyadi Nugraha Prabamurti, Anies, Bagoes Widjanarko	Santri Perception on The Lgbt Phenomenon A Study in Pondok Pesantren Nurul Mursyd Village Mangunharjo District Tembalang City of Semarang
R15010	<u>Ani Margawati</u>	Perception, Knowledge of Health and Health Seeking Behaviour among Samin Community in Central Java ✓
R15011	Dewi Rokhmah, Khoiron	Relationship between Knowledge, Attitude, Perception, and Information Access with Health Literacy about HIV/AIDS in Female Sex Worker (FSW) in Coastal Area of Jember
R15012	Dharminto, Farid Agushybana	Knowledge and Attitudes of Marriage Officers on Health Reproductive and Safe Motherhood
R15013	Tuti Surtimanah	Effective Communication Methods for Increase Mothers Intention to Iva Test
R15014	Nurhasmadiar Nandini, Djazuly Chalidyanto, Widodo J. Pudjirahardjo, Nuzulul Kusuma Putri	Knowledge on Breastfeeding and Breastfeeding Behavior among Working Mothers and Housewives
R15015	Isabella	Determinant Compliance of Anti Filariasis Drug in Community of Selat Remis Village
R15016	Ariska Tri Hapsari, Zahroh Shaluhiah, Antono Suryoputro	Preventive Behavior of Filariasis in Semarang
R15017	Linda Suwarni, Abrori, Ronny Widyanto	Determinants of The Pornography Exposure Effects on Junior and Senior High School Adolescence in Sanggau District West Kalimantan
R15018	Diyah Fatmasari, Tri Wiyatini	Is Nutritional and Economic Status Related with Tooth Eruption of First Incisive Permanent Mandibular among Normal and Special Need Children?

## CONTENT

COPYRIGHT.....	
PREFACE.....	
ORGANIZING COMMITTEE.....	
MAIN SPEAKERS.....	
TIME SCHEDULE.....	
ORAL PRESENTATIONS.....	
CONTENTS.....	

MAIN SPEAKERS.....	
1. Indonesian Strategies in Public Health Empowerment and Coastal Development to Achieve SDGs.....	
2. Role of Faculty Public Health Diponegoro University in Community Empowerment for the Healthy Life in Coastal and Tropical Regions of Indonesia.....	
3. Southeast Asian Coastal's Passive Migrants: Job Opportunity, Poverty, and Accessibility to Health Care.....	
4. One Health Approach for Public Health in Tropical and Coastal Area.....	
5. Managerial Epidemiology for One Health Approach in Tropical and Coastal Region.....	
6. Community Resilience and Adaptation to Climate Change in Coastal Indonesia.....	
7. Does MCH Handbook Function As A Source of Data for Care Continuum of Maternal and Child Health in Indonesia?.....	
8. The Strategic Agility of Healthcare Managers Must Rise with the Coming Tide.....	

Monday, 30<sup>th</sup> July 2018

ROOM 1.....	
1. Indicator of Dyslipidemia for Ischemic Stroke in Elderly with Hypertension.....	
2. Physician Involvement with Family "Genogram Model" to Improve Healthy Lifestyle to Patient with Family History of Type 2 Diabetes Mellitus.....	
3. Eating Patterns and Physical Activities Reduce Diabetes Mellitus Type 2.....	
4. Bikbeng Andi: The Utilization of Koro Benguk Seed Extract as An Alternative Treatment of Diabetes Mellitus.....	
5. Antituberculosis Effect of Extract of Makasar Fruits ( <i>Brucea javanica</i> L. Merr) on <i>Mycobacterium tuberculosis</i> by In Vitro.....	
6. Determinants of Plumbun Level in Blood among Elementary School Students in Cinangka, Bogor .....	



18. The Impact of Asymmetric Information in Medical Services: A Study in Progressive Law Perspective .....

#### ROOM 5.....

1. Forgiveness Meditation as an Effort in Improving Mental Health among College Students.....
2. Psychoeducation Dzikr Reduces Perceived Stress, Depression Syndrome, Cortisol and Increases IgG on Primiparous Women.....
3. Cross-Cultural Validation of The Patient Health Questionnaire (PHQ-9) in Bahasa Indonesia to Measure Depression among People Affected by Leprosy in Central Java, Indonesia.....
4. Measuring Social Participation of Persons Affected by Leprosy in Indonesia Through Validating A Simplified Version of The Participation Scale.....
5. Depression Associated with Quality of Life in People with Paraplegia.....
6. Adverse Childhood Experiences and Depression among University Students.....
7. The Impact of Postpartum Coping Skill Classes toward Stress Level, Maternal Self Efficacy, Growth and Development of The Baby and Cortisol Level.....
8. Psychometric Measurement of Stress among Midwives at Primary Health Care Province of Central Java Indonesia.....
9. Santri Perception on The LGBT Phenomenon A Study in Pondok Pesantren Nurul mursyid Village Mangunharjo District Tembalang City of Semarang.....
10. Perception, Knowledge of Health and Health Seeking Behaviour among Samin Community in Central Java.....
11. Relationship between Knowledge, Attitude, Perception, and Information Access with Health Literacy about Hiv/Aids in Female Sex Worker (FSW) in Coastal Area of Jember.....
12. Knowledge and Attitudes of Marriage Officers on Health Reproductive and Safe Motherhood.....
13. Effective Communication Methods for Increase Mothers Intention to Iva Test.....
14. Knowledge on Breastfeeding and Breastfeeding Behaviour among Working Mothers and Housewives.....
15. Determinant Compliance of Anti Filariasis Drug in Community of Selat Remis Village.....
16. Preventive Behavior of Filariasis in Semarang.....
17. Determinants of The Pornography Exposure Effects on Junior and Senior High School Adolescence in Sanggau District West Kalimantan.....
18. Is Nutritional and Economic Status Related with Tooth Eruption of First Incisive Permanent Mandibular among Normal and Special Need Children?.....

#### ROOM 6.....

1. Midwives Acceptance Perspectives of Web-Based Information System for Maternal and Child Health and (Siskiagiz) at Temanggung District .....



# Perception, Knowledge of Health and Health Seeking Behaviour Among Samin Community in Central Java

Ani Margawati<sup>1\*</sup>

<sup>1</sup>*Dept of Nutrition Science, Faculty of Medicine, Indonesia*

*\*Presenting author : Ani Margawati, 081325858445, animargawati@gmail.com*

## Abstract

The Samin community is a community group who follow the ideology of Samin, and they live in Blora, Pati, and Kudus. Samin's ideology is a value and belief of their noble grandmother as resistance against the Dutch colonial. Until now they are still many who follow the value of these values so as not to engage in government programs including health programs. The purpose of this study was to analyze the perception, knowledge, and health seeking behaviour among Samin community. The research design is observational which is done by the qualitative method. The subjects of the study were women who had children under five who were living in Blora, Pati, and Kudus. Sampling technique is purposive sampling. Data collection method is an indepth interview and focuses group discussions. Data were analyzed with content analyzis. The results showed that the Samin community living in Blora tend to be more open with outsiders, so they have utilized puskesmas, and posyandu, while the Samin community living in Kudus, Pati tend to be more closed and more comfortable with a traditional healer (dukun) for both treatment and birth attendant. Perception and health knowledge tend to be good; they believe the concept of healthy is people who still can dayly activities. They still in traditions ceremonies related to the life cycle such as pregnancy, birth, etc. It needs guidance and provision of health information/education to Samin community groups so that they can better utilize health facilities as a society in general.

# **Perception, Knowledge of Health and Health Seeking Behavior among Samin Community in Central Java**

Ani Margawati

## **Abstract**

The Samin community is a community group who follow the ideology of Samin, and they live in Blora, Pati and Kudus. Samin's ideology is a value and belief of their noble grandmother as resistance against the Dutch Colonial. Until now the Samin's people who follow the value and principals of Samin's are not engage in government program including health programs. The aim of this study was to analyse characteristics of the subjects, the perception, knowledge and health seeking behaviour among Samin's people in Central Java.

The design study was observational and conducted through quantitative and qualitative data. The subject of the study was woman who has children under five years old who were living in Blora, Pati and Kudus. Sampling technique were purposive sampling. Quantitative data were analysed by computer and qualitative data by content analysis.

This study found that the Samin community living in Blora tend to be more open with the outsiders while Samin who were living in Pati and Kudus tend to be more closed and more comfortable with a traditional healer for both treatment and birth attendat. Perception and health knowledge tend not to be good; they believe the concept of healthy people who still can do daily activities. They still do traditions ceremonies related to the life cycle such as pregnancy, birth etc. It's need guidance and provision of health information/education to Samin community groups so they can better utilize health facilities as a society in general

Key words: Samin, perception, health knowledge

## **Introduction**

Indonesia is a multicultural country as the result of the multi ethnicity of its people. The census conducted by Indonesian Statistical Board in 2010 showed that there are total 1300 ethnics from 7 main ethnics found in entire region of Indonesia. Some of those ethnics apparently can also still be categorized as indigenous people. Cited from the The International Labour Organization's (ILO) Convention concerning Indigenous and Tribal Peoples in Independent Countries (No. 169), peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present State boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions (UN 2013). As a result, each indigenous people usually has a unique characteristics which distinguish them from non indigenous people or any other indigenous people.

This unique characteristic of each indigenous people is usually related to its cultural aspects but according to Indigenous World in WHO (2007), indigenous people tends to have the same characteristics in economical, educational, and health aspects. Indigenous people usually have lower economical level, lower educational level, and lower health status compares to the rest of the population and as a result indigenous people usually prone to malnutrition.

In Java Island, actually there are still many other indigenous people beside Baduy and Kasepuhan Ciptagelar people, such as Samin (*Sedulur Sikep*) people. Samin people are the indigenous people who live in north region of Java Island, more precisely in the Central Java province and some part of East Java province. Unlike any other indigenous people, Samin people do not live only in a centralized area, but they are spread in some areas all along the Kendeng mountain range in the north region of Java Island. Samin people have their own unique characteristic which is formed by their culture and it differentiates them from non indigenous people. Culture itself can be defined as beliefs, values, and attitudes practiced and accepted by members of a group or community. It is usually learned and not inherited (Kittler & Sucher 2008).

The culture Samin people has determined their mindset and creates their own life principles. They have their own religion, which called as “Adam”. They also have their own life principles. Samin people must live from agricultural sectors and they are forbid to do trading in any other sectors except agricultural according to their life principles. Samin people are also forbid to take any formal education.

Culture is actually dynamic and it can change through times, but in Samin people it is quite unique. Samin people actually do not oppose any changes in their life but they tend to set back to their root, their culture, and their way of life which were taught by their ancestor. This kind of characteristics, makes some government program especially related to food, nutrition, and health are hard to penetrate. This kind of culture or behavior may bring negative effects to their nutritional status or health.

Occupation is usually closely related to income. According to their life principles, Samin people must live from agricultural sectors so that all of them are working as farmers. In Indonesia, the prosperity of farmer remains problematic. Farmers usually have lower income. People with lower income usually consume less nutritional food (Darmon & Drewnowski 2008).

The firmness of Samin people in preserving their culture and way of life make government program such as family planning program hard to penetrate. As a result they have a larger household size. Household with larger size usually has a higher prevalence in child malnutrition. Household size usually influences their ability in obtaining various and nutritional food (Ricciuto *et al.* 2006).

The research regarding socio and culture on food and nutrition of Samin people is rarely conducted. Samin people who are indigenous with all their uniqueness are

interesting to be studied especially regarding their nutritional aspects., The aim of this study was to analyse characteristics of the subjects, the perception, knowledge and health seeking behaviour among Samin's people in Central Java. of Samin people in Central Java.

## **Methods**

The design study was observational study and conducted through quantitatively and qualitatively. The locations were selected purposively. Kudus and Pati were selected to represent Samin people who are still firmly hold their culture and got less influence from surrounding society. Blora was selected to represent Samin people who already explored and influenced by surrounding society.

The population of this study was the households which had children under five of Samin indigenous people from three districts in Central Java Province, namely Kudus, Pati, and Blora. Samin indigenous people were different from any other indigenous people. They were not centralized in one region but they were spread in some regions all along Kendeng Mountain Range in Northern part of Java Island.

This study was also used mixed method, not only quantitative approach but also qualitative approach. The qualitative data were obtained through in-depth interview and also FGD (Focus Group Discussion). The total respondents for qualitative approach were 71 respondents. There were 32 mothers of children under five and women over 50 years old who participated in FGD. Meanwhile, the total respondents for in-depth interview were 39 respondents.

Since mixed methods were used in this study, the data collection could be divided into two types, the quantitative data and the qualitative data. The quantitative data were collected through direct interview using a set of questionnaire and direct anthropometric measurements, both conducted by enumerators. To make sure data quality, the interviewers were trained both on how to interview and also to conduct anthropometric measurement before data collection process. The interviews were all conducted in each sample's house and approximately 1 hour was spent to interview each sample and conduct the anthropometry measurement. The interviews were conducted in the morning until afternoon. The time of interview was flexible depended on the time availability of the samples. Anthropometric measurements were performed right after the interview finished.

Qualitative data such as images and recordings. Transcription of recordings will be made then identified and analyzed for the meaning, value, belief, experience, and practice. The relationship between food taboos, food suggestions, traditional beliefs and practices and nutritional status of the pregnant women will be analyzed qualitatively descriptive. The quantitative and qualitative data will support each other so they will further illustrate the actual conditions at the research sites. Qualitative data can explain the reasons why and how an event occurs.



## Results and Discussions

The analysis results in Table 1 showed that the mean age of the fathers and mothers of the children under five in the Samin People were  $31.8 \pm 7.5$  and  $27.5 \pm 6.4$  years or belonged to the young adult category according to Moh (2009). This study also showed that the fathers and mothers of the children under five in the Samin People in Kudus-Pati were younger than those in Blora. Age was an important issue for a mother because it was related to organ maturity and psychological readiness to get pregnant and give a birth (Trihardiani 2011). A mother who was too young would have a greater risk during the partus (Ginting *et al.* 2012).

Table 1. Distribution of parental age of indigenous people of Samin (*Sedulur Sikep*)

Age (year)	Kudus-Pati (n=46)	Blora (n=52)	Total (n=98)
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD
Father	28.5 $\pm$ 4.6	34.4 $\pm$ 8.2	31.8 $\pm$ 7.5
Mother	25.6 $\pm$ 5.6	29.1 $\pm$ 6.6	27.5 $\pm$ 6.4

\*Not all parents in Kudus-Pati knew their exact age because of their culture that their age is only "one" since they only live once

The paternal and maternal age in this study belonged to the productive age group (15-64 years) according to BKKBN (2013). The productive age of the parents also showed by the parents' occupation that most of them worked as farmers. Someone in productive age was considered to have a good physical condition to cultivate their land so that they would have maximum productivity (Mulyaqin *et al.* 2016). This study also showed that not all the fathers and mothers of the children under five in the Samin People in Kudus-Pati knew their exact age. For Samin people, their age is only one. They believe that they only live once so that their age is only one forever.

Table 2 shows that the education level of the fathers and mothers of the children under five in the Samin People is still relatively low. A total of 67% fathers and mothers of the children under five in the Samin People did not attend formal schooling. For Samin people, education could be obtained from everywhere, not merely from formal schooling and for them the main teacher that must teach the children was their own parents. This result was lower than the average length of education of the residents of Central Java Province in 2016 which reached 7.15 years or had graduated from elementary school (BPS 2017). Only 18.3% of the fathers and 15.0% of the mothers of the children under five in the Samin People who graduated from 9-year basic education (graduated until junior high school). The low education level of Samin people is due to their culture that does not allow their children to take formal schooling. Table 2 also shows that the education level of the fathers and mothers of the children under five in the Samin People in Blora is higher than the Samin People in Kudus-Pati. Only 3.8% of the fathers and mothers of children under five in the Samin People in Blora not attending school compared to 95.6% of the fathers and mothers of children under five in the Samin People in Kudus-pati.

Table 2 Distribution of parental education level of indigenous people of Samin (*Sedulur Sikep*)

Characteristics	Kudus-Pati (n=68)		Blora (n=52)		Total (n=120)	
	n	%	n	%	N	%
<b>Father</b>						
-Not attending school	65	95.6	2	3.8	67	55.8
-Elementary school	0	0.0	17	32.7	17	14.2
-Junior High school	3	4.4	19	36.5	22	18.3
-High school	0	0.0	12	23.1	12	10.0
-University	0	0.0	2	3.8	2	1.7
<b>Mother</b>						
-Not attending school	65	95.6	2	3.8	67	55.8
-Elementary school	1	1.5	18	34.6	19	15.8
-Junior High school	1	1.5	17	32.7	18	15.0
-High school	1	1.5	14	26.9	15	12.5
-University	0	0.0	1	1.9	1	0.8

Table 3 shows that most of the fathers of children under five (60.8%) in the Samin People work as farmers while most of the mothers of children under five (55.0%) are housewives. The diversity of occupation types of the fathers of children under five in both groups of Samin People was not much different. Farmer is the most common type of informal sector work among the fathers of children under five, either in the Samin People in Kudus-Pati (75%) or Blora (42.3%). Meanwhile, according to Khomsan *et al.* (2011), the occupation in the informal sectors that do not require certain requirements in the field of work makes the income received not fixed, and there is no guarantee of an increase in the amount of income over time. It can be seen that there is a difference in the occupation types of the mothers of children under five in both groups of Samin People. Most of the mothers of children under five in the Samin People in Kudus-Pati (45.6%) also worked as farmers, but most of the mothers of children under five in the Samin People in Blora (75%) worked as housewives.

According to FAO (2014), assessing nutrition-related knowledge, attitudes and practices offers an opportunity to better understand a given situation by providing insights into the social, psychological and behavioral determinants of nutritional status. Nutrition-related knowledge is an individual's understanding of nutrition, including the intellectual ability to remember and recall food- and nutrition-related terminology, specific pieces of information and facts.

The maternal nutritional knowledge among Samin people was classified as moderate with a score of  $66.5 \pm 21.8$ . A significant difference ( $p < 0.00$ ) was seen between the maternal nutritional knowledge in Blora ( $75.4 \pm 19.3$ ) that was higher than the one in Kudus-Pati ( $59.7 \pm 21.3$ ). The maternal nutritional knowledge is affected by the formal education level. A study conducted by De Vriendt *et al.* (2009) on 803

women found that the important factors which influenced nutritional knowledge were women's education level, age, and type of occupation. The mothers in the Samin community in Blora were relatively more educated than those in Kudus-Pati. From the education characteristics data, it was known that 95.6% of the mothers in Kudus-Pati had never attended school while more than 95% of the mothers in Blora generally had attended the elementary school, junior high school, and senior high school.

Table 3. Distribution of maternal nutritional knowledge score

Nutritional knowledge (%)	Kudus-Pati (n=68)		Blora (n=52)		Total (n=120)	
	n	%	n	%	n	%
Poor (<60)	34	50.0	7	13.5	41	34.2
Moderate (60-80)	24	35.3	24	46.2	48	40.0
High (>80)	10	14.7	21	40.4	31	25.8
Mean±SD	59.7±21.3		75.4±19.3		66.5±21.8	
p-value	0.00*					

\*Mann-Whitney test

This study shows that the maternal health status in the Samin community in Kudus-Pati is precisely better than the mothers of children under five in the Samin community in Blora. There were 28.8% of the mothers of children under five in the Samin community in Blora who had a URTI in the last six months, while only 16.2% of the mothers of children under five in Kudus-Pati had the disease. The health research conducted by Moh of Indonesia in 2013 showed that the prevalence of URTI infection ranged from 20.8 – 27.3% for population age of >25 years old. Similar to children URTI infection is related to environmental sanitation in which this study showed that Samin Community in Blora had worse environment sanitation habit.

The means of transportation commonly used by people to reach health facilities is a motorcycle. As is known, the Samin community lives in rural villages where public transport is not available to be used by the people.

The majority of Samin people in Blora (71.2% or 37 people) go to the midwife and 21.2% of them (11 people) go to the doctor/clinic. It was different from the Samin people who lived in Pati-Kudus, in which more people (35.4% or 24 people) went to the doctor/clinic than midwife (23.5% or 16 people). There were relatively more people in the Samin community in Pati-Kudus (22.1% or 15 people) doing self-medicine than Samin people in Blora (5.8% or 3 people). Table 5 also shows that Samin people in Blora do not seek treatment from the *dukun* or go to the public health center in village level (Poskesdes).

Table 4 Health access of indigenous people of Samin (*Sedulur Sikep*)

Health Access	Kudus-Pati (n=68)		Blora (n=52)		Total (n=120)	
	N	%	n	%	n	%
Transportation to go to public health center						

- Motorcycle	68	100.0	52	100.0	120	100.0
<b>If you are sick, you usually go to</b>						
- Doctor/ clinic	24	35.3	11	21.2	35	29.2
- Midwife	16	23.5	37	71.2	53	44.2
- Buying medicine in store	15	22.1	3	5.8	18	15.0
- Public health center	10	14.7	7	13.5	17	14.2
- <i>Dukun</i> (healer)	7	10.3	0	0.0	7	5.8
- Public health center in village level	5	7.4	0	0.0	5	4.2
<b>Do you have health care security</b>						
- Yes	9	13.2	15	28.8	24	20.0
- No	59	86.8	37	71.2	96	80.0
<b>Public Health Care distance</b> (Mean $\pm$ SD), km	8.21 $\pm$ 9.9		3.0 $\pm$ 0.0		5.95 $\pm$ 7.8	

This study was found that Samin people in Blora preferred midwife in the treatment of diseases and childbirth because the midwife lived in their neighborhood. The role of midwife will replace the role of a *dukun* (traditional healer) as the traditional health worker.

Samin people in Kudus and Pati (especially those living in Pati) tended to be more closed to the access of health services; thereby, they still went to the traditional health workers. Samin people that tended to be closed-off to health programs did not have access to health insurance. Table 5 shows that there are more Samin people in Pati and Kudus (86.8% or 59 respondents) who do not have health insurance compared to Samin people in Blora (71.2% or 37 respondents). These data indicate that the people in Kudus and Pati are more closed to outside information about health including health insurance program, probably due to the lack of understanding regarding the importance of health insurance.

Table 5 Distribution of health perception of indigenous people of Samin (*Sedulur Sikep*)

Health perception	Kudus-Pati (n=68)		Blora (n=52)		Total (n=120)	
	N	%	n	%	n	%
<b>Do you take your children to <i>posyandu</i></b>						
- Yes	24	35.3	50	96.2	74	61.7
- No	44	64.7	2	3.8	46	38.3
<b>The importance of taking children to <i>posyandu</i></b>						
- Yes	26	38.2	50	96.2	76	63.3
- No	42	61.8	2	3.8	44	36.7
<b>Have your children ever received vaccination?</b>						
- Yes	22	32.4	51	98.1	73	60.8
- No	46	67.6	1	1.9	47	39.2
<b>Do your children have a growth chart book?</b>						
- Yes	24	35.3	46	88.5	70	58.3



Health perception	Kudus-Pati (n=68)		Blora (n=52)		Total (n=120)	
	N	%	n	%	n	%
- No	44	64.7	6	11.5	50	40.8
<b>Do you think that the growth chart is important to maintain children growth and development?</b>						
- Yes	20	29.4	49	94.2	69	57.5
- No	48	70.6	3	5.8	51	42.5
<b>Do vaccine prevent disease?</b>						
- Yes	23	33.8	49	94.2	72	60.0
- No	45	66.2	3	5.8	48	40.0
<b>Diarrhea is transmitted through:</b>						
- Food/beverage	11	16.2	20	38.5	31	25.8
- Virus/bacteria/germ	6	8.8	10	19.2	16	13.3
- I don't know	51	75.0	22	42.3	73	60.8
<b>Do you think that washing hands using soap before a meal will prevent diarrhea?</b>						
- Yes	27	39.7	40	76.9	67	55.8
- No	41	61.3	12	23.1	53	44.2
<b>Do you use commercial still water as a primary source of water for drink?</b>						
- Yes	53	77.9	15	28.8	68	56.7
- No	15	22.1	37	71.2	52	43.3
<b>Do you believe that boiling water before drinking will prevent any infection disease?</b>						
- Yes	55	80.9	51	98.1	106	88.3
- No	13	19.1	1	1.9	14	11.7

Note: Di Blora ada PAM swakarsa sehingga penggunaan aqua kurang menonjol

It appears that the people who lived in Pati and Kudus never brought their children to Posyandu to check their health (64.7% or 44 respondents). This condition was very different from the Samin people living in Blora who always took their children to the Posyandu (96.2% or 50 respondents). The qualitative data indicated that the people who lived in Pati and Kudus did not have the awareness to come to the Posyandu. The cadres had to visit the mothers of the children under five one by one, even up to four times. However, they did not necessarily come because they did not want to participate in the Posyandu activities. They also believed that their children were healthy; thereby the children did not need to be weighed. This condition was different from the Samin people living in Blora who had been aware of the importance of Posyandu for their children's health.

The same findings also appeared on child immunization data. The majority of the mothers in the Samin community in Blora (98.1% or 51 mothers) had immunized their children. Meanwhile, there were only 46 mothers (67.6%) in Kudus-Pati who did not immunize their children. The low immunization coverage in Kudus-Pati was certainly related to the low attendance of the children under five in Kudus-Pati at the Posyandu. The mothers who did not take their children to the Posyandu were certainly not well-informed about health programs, including immunization.

The low attendance at the Posyandu was also related to the ownership of *Kartu Menuju Sehat/KMS* (growth chart). A total of 44 mothers (64.7%) in Kudus-Pati did not have the growth chart, while the majority of the mothers (88.5% or 46 mothers) in Blora had growth chart. The mothers in Blora with a high level of attendance at Posyandu would be more exposed to health information because they received health education/counseling at Posyandu or from the midwives. It made them understand that the growth chart would be related to the child's growth and development as well as the child's health.

Samin people in Blora had better health knowledge. They understood that immunization would prevent their children from getting sick. This better knowledge was certainly related to the health behaviors; i.e., they actively brought their children to be immunized. This better knowledge was also shown in the understanding of the spread of the disease. They knew that diarrhea was caused by food, viruses, and a bad environment.

Like other tribes in Indonesia, Samin people also have a culture which is then applied in their customs. Samin people are known to have a unique culture, whose inheritance is carried out from generation to generation. Through cultural influences, humans learn to communicate and view their world through the categories, concepts, and labels produced by their culture. In relation to health problems, Samin people also have a culture applied in their daily lives. Prayer or greeting that is always said when meeting other people is *seger waras* (may you be healthy and prosperous), and people will answer the greeting with the words *sami-sami seger waras* (may you also be healthy and prosperous). *Seger waras* is defined as hale and hearty, harmonious, and live well.

“Healthy and prosperous have good meaning and hope; i.e., that we are always given health, harmony, and a good life. By saying the words (i.e., may you be healthy and prosperous), the person who gets the greeting is expected to be not only physically healthy but also spiritually healthy”

The habit related to health ritual which is held by the people begins with a 7-month pregnancy ceremony. Samin people still know the 7-month custom or *mitoni* which is referred to as *tingkep*. *Tingkep* is a ceremony held on the seventh month of pregnancy. It is one of the big ceremonies. The pregnant women who come from rich families usually slaughter buffaloes as the food to be served to guests who are present at the ceremony and to be delivered to neighbors, relatives, or other families. However, if the family is not rich, there is no need to hold a large ceremony. It is enough only to hold a *borokohan* event.

The dietary patterns of Samin people depend more on the produce from the earth such as vegetables, fruits, rice, and other animal source foods (e.g., buffalo meat, chicken meat, and chicken eggs). Vegetables, fruits, and rice are often obtained from their own garden produce rather than buying from the market. There is a market

in each village of Samin people, but the sellers are not Samin people because they are not allowed to trade.

Samin people are simpler regarding food selection. According to them, all the food is delicious. They rarely eat instant food. They prefer to eat the food that they process themselves.

“If you want to be healthy, you should eat delicious foods. However, for the village people, the food will be delicious if they are healthy and fond of eating. Samin people are simple people; thereby, they do not think too much about food. The important thing is being healthy so that all food will taste delicious. The food is also a necessity; thereby, just eat what’s available.”

Samin people sometimes also consume packaged food, but not often. They believe that packaged food is not healthy. It is healthier to consume the self-cooked food.

Samin people buy their needs in the market such as side dishes, vegetables, and cooking spices. However, they never buy rice because almost all Samin people are farmers and they have their own rice supply. Some Samin people plant vegetables in their fields which are not far from their homes.

During pregnancy, Samin people in Pati do not have food taboo. They believe that all food is good and allowed to be consumed if the ones consuming it do not vomit or feel nauseous.

“There is no food taboo during pregnancy in the community. Only the person herself who understands what can and cannot be eaten.”

During pregnancy, Samin people in Kudus have some food taboos. For example, the cold water is not allowed to drink during pregnancy. It is believed to cause the baby to become large in the womb so that it can complicate the birth process. During pregnancy, Samin people in Blora believe that pregnant women should not consume fruit that has a moon-like shape without cutting it in pieces; for example, apple. It is believed to cause a lump on the baby’s head. Besides that, there is a restriction on consuming catfish. Consuming catfish during pregnancy is believed to cause fin growth on the right and left of the head of the newborns.

Besides food taboo, the pregnant women in the Samin community in Pati, Kudus, and Blora believe that they should not carry objects on their bodies while pregnant, such as carrying eggs. It is believed to cause boils on the baby’s head at birth. Besides that, it is forbidden to build a house, kill animals, and cut hair while pregnant. They believe that doing these things will cause the birth process to be difficult.

“Actually, there are no food taboos during pregnancy. However, in the past, the pregnant women were not allowed to carry eggs, because it would cause boils on the baby’s head. However, in the present, people do not obey it any more.”

Besides the food taboo or behavioral restrictions, the lactating mothers or the women in the postpartum period also have things to do such as doing *tarak*, consuming coriander, drinking *jamu* (traditional herbal medicine), and applying cold powder throughout the body.

After giving birth, the mother is required to do *tarak*. It is white fasting in which the mother is not allowed to consume spicy food, vegetable soup, and fishy-smell food. The foods that can only be consumed are white rice, salt, and crackers. This fasting is believed to cure the womb faster. *Tarak* is carried out for 40 days or until the mother does *walik dadah*.

The mother who has performed *walik dadah* is still not allowed to eat spicy and fishy-smell foods, because people believe that consuming these kinds of foods will make the breast milk taste spicy and have fishy smell. After giving birth, the mother is also given a *jamu galian singset* which is mixed with *asem kawak*.

Samin people in Pati, Kudus, and Blora nowadays still have the principle that solid food or other foods besides breast milk can be given to the babies after birth. However, some mothers have understood that babies aged 0-6 months should only be given breast milk. The mothers give food to the babies before the age of 6 months because of the teachings given by their parents or grandmothers. According to them, if the baby is constantly crying, it means that the baby is hungry. The food given is mashed rice which is added with mashed banana or the soup from the vegetable soup.

“I have fed my child since he was a baby because he was fussy if he only drank breast milk. If the child is fed, he is not fussy. Therefore, fussy means hungry. My child is usually fed with soft rice with *sayur bening* or banana.”

It is different from Samin's mothers in Blora. They have understood that solid food can only be given to babies after they are six months old. Before the age of six months, they are only given breast milk.

The tradition of sending food is usually performed when there is a big event, ceremony, or when people celebrate something such as *tingkep* (a ceremony held on the 7<sup>th</sup> month of pregnancy), a feast celebrating circumcision, and birth ceremony. However, people do not always have to send food. It depends on the intention and ability of the owner of the event. The type of food delivered also does not have certain rules. The rich family can slaughter a buffalo and then distribute the meat to their neighbors. A rather rich family slaughters goats, and the poor family only slaughters chickens.

The food distribution system in the house does not have regulations, and it does not require the father to eat before his children or his wife eat because they are not too concerned with such things. The food is cooked by their wife or daughters because their children have been taught to live independently since childhood and to be able to take care of themselves and their families.

## **Health Behaviors**



Health issues in the Samin Pati, Kudus, and Blora communities received mixed responses. The response of Samin people in Pati to health issues was still negative. Some government programs such as Posyandu and immunizations were rejected by Samin people in Pati. Almost all children under five in the Samin community in Pati were not given immunizations. The immunization was rejected because it caused the child who was originally healthy to become sick. The sickness here was a fever that occurred after being immunized. In their viewpoint, the immunization was not beneficial for the health of their children, according to what was conveyed by village midwives or cadres in Pati.

.”

The health education in the Samin community in Pati also did not receive a positive response. Samin people were afraid of being gathered during health education. The health issues of Samin people in Pati were different from some of the Samin people in Kudus who had understood the issues. Therefore, some of Samin people in Kudus had given immunizations to their children. However, there were also some children under five who were not given immunization by their mothers. The reason for not being immunized was also the same as the Samin people in Pati. They still thought that the children under five would become ill after receiving immunization shots.

The response of Samin people in Blora regarding health issues was different from other Samin communities. Samin people in this region had already understood about health. Posyandu and immunization had also been carried out well. Almost all Samin people in Blora had been willing to give immunization to their toddlers. They also had been willing to come to the Posyandu which was held once a month. The mothers in the Samin community in Blora had understood the importance of immunization for the children under five.

The breast milk is given immediately after the baby is born. However, there is no age limit for breastfeeding especially in Samin people in Mbombong Pati Village who do not wean their children. The mothers stopped the breastfeeding after the child refused to consume breast milk. Meanwhile, in Samin people in Kudus and Blora, the weaning practices had been performed by the mothers of children under five. They had planned to wean their children after two years of age.

The complementary feeding on 0-month-old infants was carried out by Samin people in Pati and some of the Samin people in Kudus. It was according to their view that if the baby was crying, the crying was a sign that the baby was hungry. One of the methods to stop the crying was to feed the baby. The food given was the mashed rice or instant porridge. They also fed their baby so that the baby could sleep well.

Samin people in Blora had understood that they should not give the complementary food to the 0-month-old infants. During the age of 0-6 months, they only gave the breast milk to their babies. The complementary feeding was performed

when the baby was six months old. It was according to the recommendation from the midwives and the guidelines in the *Kartu Menuju Sehat* (growth chart) book.

## Conclusions

The socio-economic characteristics between Samin people in Kudus-Pati and Blora apparently found to be different in which the community who lived in Blora tended to have better characteristics. They had better education level, economic level, even the mothers had significant better nutritional knowledge.

The difference on perception of health and nutrition services also could be seen between Samin people in Kudus-Pati and Blora. Samin people in Blora tended to have better perception regarding both aspects as they were more opened to government programs. They already took their children to Posyandu regularly and even vaccinated their children. But apparently Samin people in Blora had worse hygiene and sanitation practices on distance between septic tank and water source, garbage disposal, and primary drinking water source.

## References

- Abuya BA, Ciera J, and Kimani-Murage E. 2012. Effect of mother's education on child's nutritional status in the slums Nairobi. *BMC Pediatrics*. 12(80): 1-10.
- Abdullah ZD, Shah T, Ali S., Ahmad W, Din I.U, Ilyas A. 2017. Factors affecting household food security in rural Northern Hinterland of Pakistan. *Journal of the Saudi Society of Agricultural Sciences*. 1-32. DOI: 10.1016/j.jssas.2017.05.003
- Act of The Republic of Indonesia Number 7. 1996. Food. Jakarta: The State Minister State Secretary of The Republic of Indonesia.
- Amponsah SK, Apenkwa J, Ojo L, Solomon KA, Akwasi E, Hagar E. 2018. Assessing the relationship between dietary intake, hygienic practices and protein energy malnutrition among children under five at Ahafo Ano North District. *J Clin Nutr Diet* Vol.4 No.1:4.
- Asian Development Bank. 2013. Food security in Asia and the Pacific. Philippines: Asian Development Bank.
- Ayiasi RM, Kasasa S, Criel B, Orach CG, Kolsteren P. 2014. Is antenatal care preparing mothers to care for their newborns? A community-based cross-sectional study among lactating women in Masindi, Uganda. *BMC Pregnancy and Childbirth* 2014 14:114.
- Badake QD, Maina I, Mboganie MA, Muchemi G, Kihoro EM, Chelimo E, Mutea K. 2014. Nutritional status of children under five years and associated factors in Mbeere South District, Kenya. *African Crop Science Journal*, Vol. 22, No. s4, 2014, pp. 799-806.

- Bhandari TR, Chhetri M. 2013. Nutritional status of under five year children and factors associated in Kapilvastu District, Nepal. *J Nutrition Health Food Sci* 1(1): 6. <http://dx.doi.org/10.15226/jnhfs.2013.00106>.
- [BKKBN] Population and National Family Planning Agency. 1998. Gerakan Keluarga Berencana dan Keluarga Sejahtera (Family Planning and Prosperity Movement). Jakarta: BKKBN.
- [BKKBN] Population and National Family Planning Agency. 2013. Be productive in productive age (*Menjadi Produktif di Usia Produktif*). Jakarta: Direktorat Kerjasama Pendidikan Kependudukan BKKBN.
- [BPS] Central Bureau of Statistics. 2017. Jawa Tengah Province in Figures 2017. Semarang: Badan Pusat Statistik Provinsi Jawa Tengah.
- [CDC] Centers for Disease Control and Prevention. 2015. Water, Sanitation & Environmentally-related Hygiene. <https://www.cdc.gov/healthywater/hygiene/>. [cited in March 29th, 2018].
- Coates J, Swindale A and Bilinsky P. 2007. Household food insecurity access scale (HFIAS) for measurement of food access: indicator guide (V.3). Washington D.C (US): Food and Nutrition Technical Assistance Project, Academy for Educational Development.
- Cordero-Ahiman OV, Santellano-Estrada E, Garrido A. 2017. Dietary diversity in rural households: the case of indigenous communities in Sierra Tarahumara, Mexico. *Journal of Food and Nutrition Research*, vol. 5, no. 2 (2017): 86-94. doi: 10.12691/jfmr-5-2-3.
- Darmon N and Drewnowski A. 2008. Does social class predict diet quality? *American Journal of Clinical Nutrition* 87:1107–17.
- De Vriendt T, Mattys C, Verbeke W, Pynaert I, De Henauw S. 2009. Determinants of nutrition knowledge in young and middle-aged Belgian women and the association with their dietary behavior. *Appetite* 52 (2009) 788–792. doi:10.1016/j.appet.2009.02.014.
- den Hartog AP, Van Staveren WA and Brouwer ID. 2006. *Food Habits and Consumption in Developing Countries*. Wageningen (NL): Wageningen Academic Publisher.
- Dixit P, Khan J, Dwivedi LK, Gupta A. 2017. Dimensions of antenatal care service and the alacrity of mothers towards institutional delivery in South and South East Asia. *PLoS ONE* 12(7): e0181793.
- Elizabeth AM and Raj S. 2012. Impact of bio-social factors on morbidity among under-five children in odisha. *Health and Population - Perspectives and Issues* 35(4), 176-192.

[FAO] Food and Agriculture Organization. 2002. *Food Security: Concepts and Measurement*. Rome (IT): FAO.

---

. 2014. Guidelines for assessing nutrition-related knowledge, attitudes and practices. E-ISBN 978-92-5-108098-6. <http://www.fao.org/3/a-i3545e.pdf>.

[FAO/IFAD/WFP] Food and Agriculture Organization, International Fund for Agricultural Development, World Food Programme. 2014. The State of Food Insecurity in the World 2014: Strengthening the enabling environment for food security and nutrition. Rome: Food and Agriculture Organization.

Ginting R, Nasution E, Ardiani F. 2012. Nutrition Behavior of Young Primigravida in Working Area Tanah Tinggi Health Centre, EastBinjai District, Binjai City in 2012. *Gizi, Kesehatan Reproduksi, dan Epidemiology*. 2(2): 1-9.

Government Regulation of The Republic of Indonesia Number 17. 2015. Food Security and Nutrition. Jakarta: The Minister of Justice and Human Rights of Indonesia.

Gupta RK, Shora TN, Verma AK, Jan R. 2015. Knowledge regarding antenatal care services, its utilization, and delivery practices in mothers (aged 15-49 years) in a rural area of North India. *Trop J Med Res* 2015;18:89-94.

Horta BL, Santos RV, Welch JR, Cardoso AM, dos Santos JV, Assis AMO, Lira PCI and Coimbra CEA Jr. 2013. Nutritional status of indigenous children: findings from the First National Survey of Indigenous People's Health and Nutrition in Brazil. *International Journal for Equity in Health*. 12(23): 1-13. Doi: 10.1186/1475-9276-12-23.

Huet C, Rosol R, Egeland GM. 2012. The prevalence of food insecurity is high and the diet quality poor in inuit communities. *The Journal of Nutrition*. 2012(142): 541–547. Doi: 10.3945/jn.111.149278.

Igel TF, Krasnokutsky S, Pillinger MH. 2017. Recent advances in understanding and managing gout [version 1; referees: 2 approved] *F1000Research* 2017, 6(F1000 Faculty Rev):247.

Kabahenda M, Mullis RM, Erhardt JG, Northro C, Nickols SY. 2011. Nutrition education to improve dietary intake and micronutrient nutriture among children in less-resourced areas: A randomised controlled intervention in Kabarole district, western Uganda. *S Afr J Clin Nutr*, 24:83-88.

Kennedy G, Ballard T, and Dop MC. 2010. Guidelines for Measuring Household and Individual Dietary Diversity. ISBN 978-92-5-106749-9. Washington D.C (US): EC-FAO.

Khomsan, A., Anwar, F., Sukandar, D., Riyadi, H., Mudjajanto, E.S. 2006. Studi tentang ketahanan pangan, pengetahuan gizi ibu dan kebiasaan makan pada rumah tangga di daerah dataran tinggi dan pantai (*Study on Food Security, Maternal Nutritional Knowledge, and Food Consumption Pattern among Households in High Land And Coastal Area*) . *Jurnal Gizi dan Pangan*. 1(1): 23-28.



- Khomsan A, Anwar F, Sukandar D, Riyadi H, Mudjajanto E, Wigna W. 2009. *Aspek Sosio-Budaya Gizi dan Sistem Pangan Suku Baduy* (The Socio-Cultural Aspect of Nutrition and Food System of Baduy Tribe). Bogor: PT Penerbit IPB Press
- Khomsan A, Dharmawan AH, Saharrudin, and Alfiasari. 2011. *Studi Indikator Kemiskinan pada Masyarakat dan Misklasifikasi Orang Miskin menurut Kriteria BPS, Bank Dunia, dan Sajogyo* (The Study of The Poverty Indicator on People and People Living Below The Poverty Misclassification under The Criteria of Central Bureau of Statistics, The World Bank, and Sajogyo). Bogor: Department of Community Nutrition, Faculty of Human Ecology, Bogor Agricultural University.
- Khomsan, A., Riyadi, H., Marliyati, S.A. and Jayanti, L.D. 2014. *Aspek Sosio-Ekonomi, Pangan, dan Gizi Masyarakat Kasepuhan Adat Ciptagelar di Jawa Barat* (Socio-Economic, Food, and Nutrition Aspects of Ciptagelar Indigenous People in West Java). Bogor (ID): Institut Pertanian Bogor.
- Kittler PG, Sucher KP. 2008. *Food and Culture*. California, Wadsworth Cengage Learning.
- Lisanty N, Tokuda H. 2015. Comprehending poverty in rural Indonesia: an in-depth look inside paddy farmer household in marginal land area of Banyuasin District, South Sumatra Province. *IJSSS*. 3(3): 1-9. Doi:10.11114/ijsss.v3i3.686.
- Mahan LK and Stump SE. 2008. *Krause's Food and Nutrition Therapy*. Missouri: Saunders.
- Meyer-Rochow VB. 2009. Food taboos: their origins and purposes. *Journal of Ethnobiology and Ethnomedicine*. 5(18): 1-10. doi: 10.1186/1746-4269-5-18.
- [MoH] Ministry of Health of Indonesia. 2009. *Sistem Kesehatan Nasional* (National Health System). Jakarta: Ministry of Health of Indonesia.
- \_\_\_\_\_. 2010. Result of 2010 Basic Health Research (Riset Kesehatan Dasar 2010). Jakarta: Research and Development of Health Agency.
- \_\_\_\_\_. 2013. Result of 2013 Basic Health Research (Riset Kesehatan Dasar 2013). Jakarta: Research and Development of Health Agency.
- \_\_\_\_\_. 2017. *Hasil Pemantauan Status Gizi Tahun 2016* (The Report of Nutritional Status Monitoring 2016). Jakarta: The Directorate General of Public Health, Ministry of Health of Indonesia.
- M' Kaibi FK. 2014. The Role of Agricultural Biodiversity, Dietary Diversity, and Household Food Security in Households with and without Children with

Stunted Growth in Rural Kenya [dissertation]. South Africa: Faculty of Medicine and Health Sciences, Stellenbosch University.

Mulyaqin T, Astuti Y, Haryani D. 2016. Faktor yang mempengaruhi petani padi dalam pemanfaatan sumber permodalan: studi kasus di Kabupaten Serang Provinsi Banten. *Conference paper*. May 2016: 1-8. DOI: 10.13140/RG.2.2.15776.17921.

National Institute of Diabetes and Digestive and Kidney Diseases. 2014. Chronic Diarrhea in Children. USA: The National Digestive Diseases Information Clearinghouse.

Niehof A. 2010. *Food, Diversity, and Social Change: Research Findings from Insular Southeast Asia*. Wageningen (NL): Wageningen Academic Publisher.

Ntwenya JE, Kinabo J, Msuya J, Mamiro P, Majili ZS. 2015. Dietary patterns and household food insecurity in rural populations of Kilosa District, Tanzania. *PLoS ONE* 10(5): e0126038. doi:10.1371/journal.pone.0126038.

Oni OA and Tukur J. 2012. Identifying pregnant women who adhere to food taboos in rural community: a community-based study. *African Journal Reproductive Health*. 16(3): 67-75.

Patriasih R, Wigna W, Widiaty I, Riyadi H, Khomsan A, Anwar F. 2016. Social Changes, Food and Nutrition Systems, and Dietary Diversity of Indigenous People in West Java: A Study in Kasepuhan Ciptagelar and Sinar Resmi. Bogor: PT Penerbit IPB Press

Powell B, Kerr RB, Young SL, Johns T. 2017. The determinants of dietary diversity and nutrition: ethnonutrition knowledge of local people in the East Usambara Mountains, Tanzania. *Journal of Ethnobiology and Ethnomedicine* (2017) 13:23. DOI 10.1186/s13002-017-0150-2.

Prawiro AMB. 2013. Baduy Pluralism: from Myth to Reality. *AL ALBAB - Borneo Journal of Religious Studies (BJRS)* Volume 2 Number 1 June 2013.

Ricciuto L, Tarasuk V, Yatchew A. 2006. Socio-demographic influences on food purchasing among Canadian households. *European Journal of Clinical Nutrition*. 2006(60): 778–790. Doi: 10.1038/sj.ejcn.1602382.

Saaka M and Osman SM. 2013. Does household food insecurity affect the nutritional status of preschool children aged 6–36 months? *International Journal of Population Research*. 2013(): 1-13. Doi: 10.1155/2013/304169.

Sanjur D. 1982. *Social and Cultural Perspective in Nutrition*. New Jersey (US): Prentice-Hall.

Saputra O, Anam K. 2016. Life style as risk factor of hypertension in seaboard community. *Majortiy*. 5(3): 1-6.

- Sigarlaki HJO. 2006. Karakteristik dan faktor berhubungan dengan hipertensi di Desa Bocor, Kecamatan Bulus Pesantren, Kabupaten Kebumen, Jawa Tengah. *Makara Kesehatan*. 10(2): 78-88.
- Singh KD, Alagarajan M, Ladusingh L. 2015. What explains child malnutrition of indigenous people of northeast india? *PLoS ONE*. 10(6): 1-15. doi:10.1371/journal.pone.0130567.
- Singh S, Shankar R, Singh GP. 2017. Prevalence and associated risk factors of hypertension: a cross-sectional study in Urban Varanasi. *Hindawi International Journal of Hypertension* Volume 2017, Article ID 5491838, 10 pages.
- Sukandar, D. 2006. *Makanan tabu di Banjar, Jawa Barat* (Food Taboo in Banjar, West Java). *Jurnal Gizi dan Pangan*. 1(1):51-56.
- \_\_\_\_\_. 2007. *Makanan tabu di Jeneponto, Sulawesi Selatan* (Food Taboo in Jeneponto, South Sulawesi). *Jurnal Gizi dan Pangan*. 2(1):42-46.
- Syaukat Y. 2011. The impact of climate change on food production and security and its adaptation programs in Indonesia. *International Society for Southeast Asian Agricultural Sciences Journal*. 17(1): 40-51.
- Trihardiani I. 2011. *Faktor Risiko Kejadian Berat Badan Lahir Rendah Di Wilayah Kerja Puskesmas Singkawang Timur Dan Utara Kota Singkawang*. Undergraduate thesis. Semarang: Diponegoro University.
- [UN] United Nations. 2009. State of the World's Indigenous Peoples. New York: United Nations Publication.
- \_\_\_\_\_. 2013. *Indigenous Peoples and the United Nations Human Rights System*. Jenewa (CH): UN.
- [UNICEF] United Nations Children's Fund. 2012. *Nutrition Glossary : a Resource of Communication*. New York (US): Division of Communication UNICEF.
- \_\_\_\_\_. 2013. Improving Child Nutrition: The Achievable Imperative for Global Progress. New York (US): Division of Communication UNICEF.
- Vlismas K, Stavrinou V, Panagiotakos DB. 2009. Social-economic status, dietary habits and health-related outcomes in various part of the world: the review. *Central Europe Journal of Public Health*. 17(2): 55-63.
- Wibowo A, Rohmad Z, Padmaningrum D, Utami BW. 2012. *Strategi komunikasi Masyarakat Samin dalam membangun ketahanan pangan lokal* (The communications strategy of Samin Community in developing local food security). *Jurnal Ilmu Komunikasi* Vol.10 (3): 262-271.
- [WHO] World Health Organization. 2007. Health of Indigenous peoples [Internet]. [cited March 15, 2016]. Available from: <http://www.who.int>.